

Shorter Contributions

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NEW FIELD RECORDS FOR LONGEVITY IN ALLEGHENY WOODRATS (*NEOTOMA MAGISTER*) — The Allegheny woodrat (*Neotoma magister*) is a species of special concern in Virginia due, in part, to its decline and disappearance from states in the northern part of its range including New York, New Jersey, and Pennsylvania (Beans, 1992; Hicks, 1989). As part of a long-term monitoring and assessment project investigating the status and distribution of the Allegheny woodrat in Virginia, animals were live-trapped, ear-tagged and immediately released at the site of capture. Study sites have been retrapped at least once each year and, since spring 1996, two sites have been trapped bi-monthly. Field records for longevity in this species were established by two individuals collected from the long-term monitoring site located in Giles County, Virginia, approximately 10 km west of Mountain Lake in the George Washington and Jefferson National Forest.

The first record is from a male woodrat initially caught on 3 October 1992 as a 245 g adult. It was caught a total of 7 times with the last capture on 18 June 1996; it survived for at least 1,352 days or a period of at least 45 months in the wild. My work with woodrats over 7 years indicates that this individual was probably a late-spring birth and has thus survived over 50 months in the wild. At this site, peak reproduction occurs between April and June (Mengak, unpubl. data).

The second record is from a female woodrat first caught on 17 October 1993 as a 230 g subadult. It was also caught a total of 7 times during the period of 17 October 1993 and the last capture date of 29 May 1997. Time from first capture was 1,318 days (44 months) and assuming a period of 5 months between birth, in the period April to June, and first capture, she has survived at least 49 months in the wild.

This is the longest reported life span for a wild Allegheny woodrat. Previously, the Allegheny woodrat has been considered a subspecies of the eastern woodrat (*N. floridana*). Recently, strong morphologic and genetic evidence was presented that supports the elevation of the Allegheny woodrat to species status (Hayes and Harrison 1992; Hayes and Richmond, 1993). The previously reported lifespan for eastern woodrats in the wild is 991 days (Finch and Rainey, 1956). Landstrom (1971) reported longer lifespans for captive woodrats of the genus *Neotoma*. He reported

lifespans up to 67 months for captive *N. lepida* and 60 months for laboratory-reared *N. albigula*. Poole (1940) reported *N. magister* survived to at least 48 months of age in captivity.

The Allegheny woodrat is a poorly known component of Virginia's native fauna. Information on many aspects of woodrat natural history are unknown, unclear or controversial. Longevity information is important in understanding long-term trends in population size and impacts conclusions from presence/absence surveys.

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ON THE TYPE LOCALITY OF *ORCONNECTES VIRGINIENSIS* HOBBS (DECAPODA: CAMBARIDAE) — Hobbs (1951) described the stream-dwelling crayfish *Orconectes virginienensis* from specimens collected by other workers in Dinwiddie, Brunswick, and Greensville counties, Virginia. Using information given to him by ichthyologist E.C. Raney, Hobbs (1951:124-125) gave the type locality of the species as "Rowanty Creek, a tributary of the Nottoway River, 3.3 miles south of Reams Station on U. S. Hy. 301., Dinwiddie County, Virginia." He later repeated essentially the same description (Hobbs, 1989:38), changing it only by adding the phrase "5.3 km" as an equivalent of "3.3 miles." The range of *O. virginienensis* was characterized by Hobbs (1989:38) as the "Chowan drainage system in North Carolina and Virginia," and the species is also known to occur in the lower Roanoke River system in North Carolina (Cooper & Cooper, 1977; Cooper & Braswell, 1995:106). All published records for the species in Virginia are for the Chowan drainage, which includes the Nottoway River and Meherrin River systems, draining all or part of 14 counties in the southern Piedmont and Coastal Plain. As part of my studies of the crayfish fauna of Virginia, I planned in early 1997 to visit the type locality of *O. virginienensis* in order to collect topotypes. But after searching various maps, other printed references, and communicating with several individuals, I became convinced that the type locality of *O. virginienensis* as described by Hobbs does not exist and that a revision of its description of this species is in order.

At no point does US 301 pass through Dinwiddie County, Virginia, nor has it at any time since its construction, though it does come within a few hundred meters of the county's border (US Department of Agriculture, 1944; US Geological Survey 1967, 1969; Charles Gill, pers. comm.). Thus, if the holotype (USNM 91659) of *Orconectes virginienensis* was

collected in Dinwiddie County, it could not have been taken at any site along US 301. Also, while US 301 does cross Rowanty Creek, it does so in Sussex County a short distance south of the Prince George County border. Reams Station, mentioned in the description of the type locality, is today identified on most maps simply as Reams and is located in Dinwiddie County. It was established on a railroad line, thus meriting the descriptor "Station," and was the site of the Battle of Reams Station (25 August 1864) during the U.S. Civil War. However, US 301 does not pass through Reams and apparently never has. Reams is about 12.2 km (7.6 miles), north of the US 301 crossing of Rowanty Creek, and about 4.3 km west of US 301 (by air) on Cty Rte 606. Another Dinwiddie County community, Carson, is located on US 301 about 5 road km north of the Rowanty Creek bridge, but is not mentioned in the description of the type locality of *O. virginienensis*.

Two reasonable possibilities suggested themselves. One was that the type locality might actually be 3.3 miles south of Reams and in Dinwiddie County, but not on US 301. No stream crossing is found at this point, though a nearby possibility might be the crossing of Cty Rte 703 (old State Route 141) over Rowanty Creek. But this site is over 6 km south-southwest of Reams, further if measured along the secondary roads between the two. If this were the actual collection site, we would have to assume that the distance to it was measured incorrectly, that "south" in the type locality description is a rough approximation, and that the actual collection site was not on US 301. The second possibility is that the type locality might be 3.3 miles south of Carson rather than Reams, which would correspond to the site where US 301 crosses Rowanty Creek. This would involve the mistaken recording of Reams Station rather than Carson in the locality data, as well as a mistake in recording the county where the collection was made. While possibilities other than these two might be forwarded, all involve assuming even greater errors in identification of stream name, compass direction, distance, town names, or more than one of these, and no evidence exists that any such greater errors occurred.

In the belief that additional clues might be provided by the description of the stream given by Raney to Hobbs and recorded by the latter in the species description (Hobbs, 1951:125), I visited the two possible sites identified above on 5 June 1997. Unfortunately, I could not distinguish between the two based on the descriptions given by Hobbs. Rowanty Creek has stained water, a similar width, and flows through a swampy area at both of these sites. The presence of Interstate 95 adjacent to the US 301 site in Sussex County caused additional uncertainty. The